



# **Digital Strategy in Museums: A case study of The Rijksmuseum, Amsterdam.**

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## **Abstract**

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The current dissertation was written as part of the MA in Art Law and Arts Management at the International Hellenic University. It focuses on the Digital Strategy of contemporary museums and attempts to create a connection between the adoption of digital methods and audience development. The case of The Rijksmuseum, the Dutch National Museum in Amsterdam, dedicated to the art and history of The Netherlands is examined, as far as the implementation of their digital strategy is concerned.

The dissertation consists of the introduction, where the statement of the problem and the research questions are identified, followed by the methodology. The process of writing the current thesis is explained and analyzed, while the exact steps undertaken are described. The bibliographical research concentrates on the history and main features of digitalization in modern cultural organizations around the world, while the digital transformation of Dutch museums in specific is examined. The case study of The Rijksmuseum is thoroughly presented, as an exemplary case of a digitally advanced cultural institution, pointing out the main elements of the museum's approach to innovative methods. Eventually, a discussion about the research findings takes place, where the conclusions of the research are discussed.

I strongly wish to express my special appreciation and gratitude to my supervisor, Professor Konstantinos Karatzias, for his mentorship, motivation and support throughout the research process. Also, I would like to thank deeply Ms. Nanet Baumer, Head of the Digital Department of The Rijksmuseum, who was generous and kind enough to assist me in my research and my inquiries.

Keywords: digital strategy, digitalization, audience development, The Rijksmuseum, The Netherlands

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## INTRODUCTION

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The rapid development of technology has an enormous impact on our everyday life, while digital means and methods have intruded to every aspect of the modern society. The cultural field experiences a transition towards digitalization over the last few decades and new types of museums have already emerged. The disciplines and values of museology are reviewed, enriched and modernized, due to the demands of the digital age. Museum professionals seem to face the challenges of becoming digital and adapt to new ways of providing knowledge, entertainment and increase their audiences.

After many years of being hesitant about new technologies and tactics, museums eventually accepted and integrated the new tools to their practices. Starting from the internal management systems, digital applications eventually transformed the whole institution, regarding the function and operations, provided services and communication with the public. As everything else, the modern museum visitor has been, also, transformed. Most of today's museum visitors seek an educating and productive experience, but mostly they seek for exciting, fun and fulfilling activities.

This dissertation attempts to examine the impact of the Digital Strategy on audience development practices of museums. Taking into consideration the leading role of Dutch museums in Europe, concerning the traffic and digital, innovative methods used, I decided to limit my research scope and focus on a public, cultural institute, located in Amsterdam. The capital of The Netherlands receives an enormous amount of visitors annually from all around the world, allowing these institutions to have an international reputation and to compete amongst the most influential Art Museums, both in Europe and worldwide.

A historical review of the museum's digitalization follows the introduction, where the main steps made by the Museum Industry internationally and specifically in The Netherlands towards the digital transformation of cultural organizations are explored. The main features of Digital Strategies are analyzed before proceeding to the analysis of the case study of The Rijksmuseum, the National Museum of Amsterdam, a leading institute in the field of digital practices. Through the extensive overview of their activities and methods during the last decade, an attempt is made to focus on their main priorities concerning the implementation of their digital strategy. With data gathered from interviews, reports, articles and museum's public documents I aim to prove how significant is the implementation of a carefully designed digital strategy for the function of a contemporary museum, leading to the development of the museum's audiences.

## **Statement of the problem**

According to the European Parliament's 2017 report on the 'Access to culture in the European Union', recent developments in Information and Communication Technology (ICT) and digital tools are responsible for a digital shift, which has a significant impact on cultural activities, participation and production.<sup>1</sup> As a result, new challenges and opportunities are created in the cultural field, due to the new ways of access and participation of the public. It is worth mentioning, that according to Eurostat<sup>2</sup>, 90% of the households in the European Union were equipped with internet access in 2019, a considerably increased number, compared to 70% in 2010, proving the fast pace of the digital shift.

Making culture easily accessible, mainly through the digital shift and the digitization of cultural content, has utterly transformed its character, since it is no longer appealing only to the elite and the high society. On the contrary, cultural activities now seem to attract more diverse audiences, regardless of the social status or financial prosperity. The democratization of culture is defined by a set of commitments: *"respect for cultural diversity, fair and equitable access to cultural resources and support, population's participation in cultural policy-making and active participation in community cultural life"*.<sup>3</sup>

Taking the democratization of culture into consideration, contemporary cultural organizations and specifically, museums tend to increasingly adopt new digital methods and means, as part of their audience development plan. According to the study by the European Commission on Audience Development – How to place audience at the center of cultural organizations: *"Audience development is a strategic, dynamic and interactive process of making the arts widely accessible. It aims at engaging individuals and communities in experiencing, enjoying, participating in and valuing the arts through various means available today for cultural operators from digital tools to volunteering, from co-creation to partnerships. Audience development can be understood in various ways, depending on its objectives and target groups: 1) increasing audiences; 2) deepening relationship with the audiences; and 3) diversifying audiences."*<sup>4</sup>

## **Research Questions**

Due to the rapid technological development and the expansion of the Internet over the last decades, new possibilities provided by digital tools and practices are constantly emerging. According to Kidd: *"Across the museums sector since the turn of the twenty-first century we have seen something of a colonization of the online environment, including increasingly dynamic web portals and associated content: digital archives, social networks, blogs and online games"*.<sup>5</sup> Evidently, the conventional concept of the museum, as a conservative institute which solely educates and shares

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<sup>1</sup> (European Parliament, 2017)

<sup>2</sup> (Eurostat Science and Technology database, 2020)

<sup>3</sup> (European Parliament, 2017)

<sup>4</sup> (EAC/08/2015 Tender specifications)

<sup>5</sup> (Kidd, 2016)

knowledge mainly to the elite part of a society, is shifting and is now enriched with a variety of new functions, goals and approaches.

During the writing of this dissertation, I was interested in studying the way cultural organizations and specifically museums react to the digital shift and what are the steps leading to the implementation of a digital strategy. Since the possibilities provided by technological developments and the Internet are endless and they keep reshaping the way that modern society functions, I attempted to examine those possibilities in the cultural field and the results they have in attracting and engaging more people to cultural activities. More specifically, by researching an exemplary case concerning digital innovation during the last decade in Europe, namely the digital strategy applied in The Rijksmuseum, I intended to identify the main components which lead to a successful strategic plan and the results they have in the museum's popularity and recognition.

### **Methodology**

For the purposes of this study and in order to collect the data, I chose to apply the qualitative research approach. The techniques and methods employed in this type of research, use primarily qualitative information, meaning that data is collected in the form of words, sounds or images. The information can be, also, defined as “rich” or “thick”, since it is more detailed, and it concerns relatively fewer cases. In contrast to quantitative research methods, where the information gathered is nummerative, the qualitative research is believed to be more suitable to cases related to the cultural field, and especially in arts and events management. The approach is based on the belief that the people involved in a specific cultural event or activity, are best placed to describe and explain their personal experiences and views in their own words, without being restricted by the framework imposed by the researchers. Furthermore, it provides a clear understanding of people needs and aspirations, by taking into consideration personal experiences and history, while it investigates the interaction generated by arts and cultural events.<sup>6,7</sup>

According to Alan Bryman's outline of the main steps in a qualitative research, the general research questions, which in this case concern the impact of the Digital Strategy on the audience development of cultural organizations, is followed by the selection of relevant subjects and sites.<sup>8</sup> Since the museums in The Netherlands, and especially in Amsterdam, maintain a leading role in the field of digital developments, I chose to focus on two exemplary cases of institutions, which prioritize their digital strategy and introduce innovative projects and methods over the last few years. The institutions in question are The Rijksmuseum, the National Museum of The Netherlands and the Van Gogh Museum.

Therefore, the research strategy employed in this dissertation is the case study, which according to Yin, is *“an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”*.<sup>9</sup> As Thomas mentions, it is an

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<sup>6</sup> (Burton & Veal, 2014)

<sup>7</sup> (Mason, 2002)

<sup>8</sup> (Bryman, 2012)

<sup>9</sup> (Yin, 2014)

*“analysis of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more method.”*<sup>10</sup> The present study attempts to examine the digital transformation and strategy implemented by the aforementioned institutions and the way it affects visitors, overall experience and income. In order to accomplish a holistic review of the subject, I applied the method of bibliographical research, studying the history of digitalization in museums around the world and specifically in The Netherlands, the methods, the public documents and reports of the institutions.

However, the main data collection method used in this study was the in-depth interview, since the information gathered was expected to vary significantly. The in-depth interview, also referred to as semi-structured, is characterized by length, depth and structure. They tend to last at least 30 minutes each, sometimes including more than once interview per person, they encourage further and deeper discussion with the respondents, and they are less strictly structured, than questionnaire-based interviews. As a result, every interview has a different outcome and structure, even though the subject is the same.<sup>11</sup> In the present research, the management staff of the selected museums, related either to the implementation of the organizations’ general digital strategy or to a specific project of their digital departments, was asked to an in-depth interview.

My first step in my attempt to approach the museums in question was to visit their website in order to find all the necessary information. The Organizational Chart helped me in realizing and comprehending the structure of the institutes, the separate departments and their responsibilities. After locating the Digital Departments, I proceeded with finding the contact details from the staff I wanted to interview. I chose to introduce myself and my research by e-mail communication, explaining the subject and my research questions, inviting them for an interview.

Unfortunately, although my initial intention was to examine both of the institutions mentioned and compare their priorities, strategies and aspirations, I encountered one of the most common issues related to qualitative research. My attempts to establish a communication and conduct the interviews with the employees of the Digital Department of the Van Gogh Museum were unsuccessful. The museum’s website contains very few information on the staff of the museum and provides limited contact details. There has been an exchange of emails with two members of the museum’s employees, but eventually there was no sufficient communication.

As a result, I decided to focus solely on The Rijksmuseum, where I was able to correspond with the Head of the Digital Department, Nanet Baumer. Although the communication was equally challenging, since it is an international range institute, I was able to acquire relevant information from the Digital Department. The data I gathered from our contact, combined with a deep bibliographical research, allowed me to answer the dissertation’s research questions. In order to complete my study, the process of designing my research was constantly changing and adjusting to the circumstances, as Hammersley & Atkinson notice, *“in a qualitative study, research design should be a reflexive process operating through every stage of a project”*.<sup>12</sup>

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<sup>10</sup> (Thomas, 2011)

<sup>11</sup> (Burton & Veal, 2014)

<sup>12</sup> (Hammersley & Atkinson, 1995)



## LITERATURE REVIEW

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### *The Museum in the Digital Age*

The rapid development of technology which has affected almost every aspect of modern life has fundamentally changed the function of contemporary museums as well. The adoption of computer technology and the Internet by the museum sector did not occur instantly though, it was a long and gradual procedure, which lasted almost half of a century. The first step towards the digital transformation of cultural organizations was the digitization of their collections, which can be defined as the process of creating a digital representation of an object (document, image, idea, ritual etc.). Since then, a significant variety of digital means and methods has been adopted by museums all around the world, creating a new, modern type of the museum in the Digital Age.

According to the Museums Report 2016: *“This digital transformation can take many forms, from enabling museum visitors to use smartphones or tablets throughout the site to enhance their experience, to digitizing the collection and making it available online, to engaging with people before or after their visits via online channels.”*<sup>13</sup> Digitality in the museum can be defined as: *“an organized collection of digital resources within an artistic cultural field, accessible through computerized tools and services as a whole, which allow preservation, access, research and organization”*. Dewdney, Dibosa and Walsh mention that: *“Digital technologies are now looked to as the means to globally expand the reach of collections and the space of the museum in virtual form and in doing so, develop new audiences”*.<sup>14</sup>

### *Digitization, the first step*

The beginning of museum automation seemingly occurred in 1963, at the Smithsonian National Museum of Natural History, in Washington DC, although, other attempts have taken place around this time in different institutions as well. However, it was the former director of the Smithsonian Institute, Donald Squires, who proposed and developed the idea of a potential utilization of computer technology in the museum community. He was attempting to understand if it was possible to use computer technology to manage the museum’s collections and what the advantages of that practice might be. After an extensive study into his proposal, a data processing system was created for the National Museum of Natural History, which was implemented by January 1969, including standardized input procedures and query software.<sup>15,16</sup>

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<sup>13</sup> (Axiell Museums Archives Libraries, 2016)

<sup>14</sup> (Dewdney, Dibosa, & Walsh, 2013)

<sup>15</sup> A query is a request for data or information from a database table or combination of tables. This data may be generated as results returned by Structured Query Language (SQL) or as pictorials, graphs or complex results, e.g., trend analyses from data-mining tools.

<sup>16</sup> (Parry, 2007)

By introducing computer technology to museums, work practices and methods had to adjust to the new processes, meaning that all the operations related to each of the organizations had to be made transparent, at first creating a sense of discomfort among the museum employees. The process of digitization was not always supported and encouraged by the museum staff, due to some unintended results, like the loss of information during data migration from manual information systems to automated ones. As a result, everything had to be started over again, making the transition even slower. Everett Ellin wrote:

*“Given the high cost of computer use relative to the modest funds typically available to the museologist and his understandable opposition to machine intervention in the performance of his traditional functions, it is not at all surprising that museums have been rather slow to awaken to the evident potentialities of this new technology as a tool for research [...].”*<sup>17</sup>

Today, the process of digitization is considered an obligatory activity for cultural organizations, since it offers great capabilities and all kinds of collection can be digitized. Although it is a difficult and time-consuming procedure, new ways of structuring and communicating knowledge arise. Due to technological progress, many different types of digitization have emerged depending on the methods and technological means used, while a significant discussion about how cultural organizations represent their data and shape our knowledge about the objects of their collections have emerged.<sup>18,19</sup>

### *Digital Transformation of the Museum*

In the early stages of digital transformation, technology was used mainly as an assisting tool for a more effective management of collections. Eventually, it became the tool which reshaped the whole museum experience and the way it functions. As a result of this alliance between technological means and cultural organizations, the digital museum emerged. A digital museum fully incorporates digital tools in its work methods, in order to enhance its core functions: the collection, preservation, research, exhibition and communication.

The procedure for a museum to become digital consists of three parts. First, computer technology is used in order to facilitate the internal management and collection inventory. Second, museums use digital means in order to communicate with their public and finally, they entirely adopt digital tools and strategies throughout all of their main activities, merging into the networked market of information.<sup>20</sup> In general, it is obvious that technology transforms the museum in different ways. Communication and relations are shifting, not only between the museum and its audience but also between the museum and other institutions. Collection management, archive, display, research and communication are developing, with emerging new methods and practices.

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<sup>17</sup> (Ellin, 1986)

<sup>18</sup> (Laine-Zamojska, 2011)

<sup>19</sup> (Whitelaw, 2015)

<sup>20</sup> (Navarrete Hernández, 2014)

More specifically, digital transformation provides museums with a variety of new ways to offer information and share knowledge with the public. New exhibiting and curating methods allow art and artefacts to be experienced and perceived in different, more interactive ways, changing the role of the visitor. By being a passive observer, the visitor now becomes both user and participant, since he is able to interact with the objects and sometimes, he even participates in the creative process. The new forms of curation within the exhibition space generate a variety of new forms of self-representation and communication, abolishing the established frames of interpretation and classification developed in history of art, archaeology, ethnology and other academic disciplines.

Digital technology has a huge impact on many levels concerning the function of museums. There is a great number of specially designed platforms for museums and galleries, which facilitate the management of the collection, digital asset and customer relationship. TMS, Axiell and Blackbaud are some of the museum systems and they provide collection management, ticketing and event platforms and donor management systems.<sup>21</sup>

### *Online presence of the museums*

Considering the fact that the Internet has become the main source of information over the last few decades, the importance of the medium is undeniable. More than a decade ago, research already showed the significance of online presence for museums and the role of digital museum resources in the lives of museum visitors.<sup>22</sup> Plenty of contemporary museums, such as the Louvre in Paris, the Hermitage Museum in St. Petersburg and the National Gallery of Art in Washington, DC constitute remarkable examples of extensive, rich web environments, while others, such as the Museum of Modern Art (MOMA) in New York, present digital artworks and exhibitions created exclusively for online display. The web does not function as a tool to enhance the experience of gallery spaces anymore, but it has now become the artistic medium.<sup>23</sup>

Virtual museums and online resources result in more accessible collections and interactive experiences. Website visitors are empowered and actively engaged with them, and as McTavish mentions: *"they are able to follow their own interests rather than passively submit to institutional authority"*. Digitized, online collections transform the artworks to objects available for personal consumption, while the visitor's experience is described by increased convenience, speed and ease of access and accomplishment of personal desire. The context of the museum is reduced, giving the opportunity to visitors to interpret and give their own meaning to objects, developing their personal taste and opinions. Virtual museums and collections are extremely valued for their contribution as educational material for scholars, they democratize art, since they are easily accessible for everyone who has Internet access, they reach a broader range of audience and finally, they challenge elitist museum practices.<sup>24</sup>

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<sup>21</sup>(Holter, 2019)

<sup>22</sup>(Marty, 2008)

<sup>23</sup>(McTavish, 2006)

<sup>24</sup>(McTavish, 2006)

Therefore, websites and the general online presence of a cultural organizations and museums in particular must be prioritized. Since websites ultimately aim to attract more visitors to the physical space of the museum, they have to offer a pleasant online experience, which intrigues the interest of users, providing knowledge and entertainment at the same time.

### *Using digital means to engage audiences*

Since the introduction of digital practices in cultural organizations and museums, a significant transformation has been observed, concerning the way audiences engage with culture, by creating new forms of cultural participation. The behavior of audiences, specifically those of younger age, changes as technology develops. The passive culture receiver becomes more involved, requires instant access to digital content, interacts with the artwork, evaluates, observes and share his reaction and feedback. Art and culture are created, adapted and manipulated by contemporary audiences through digital technology. The most remarkable advantage brought by technology, is the fact that it makes art and cultural experiences easily accessible to everyone. People are able to browse art, explore collections, visit virtual museums, have virtual tours, book online tickets or watch a concert through their devices, on multiple platforms, whenever and wherever they are.<sup>25</sup>

Cultural organizations, having realized the potential to reach out and engage new and existing audiences, adopt new technologies and offer digital experiences, which allow visitors to create a 'deeper' connection and understanding of cultural objects. Museums need to serve their audiences and engage with their visitors either in or out of their premises and in order to achieve that, they need to comprehend their desires, interests and communication channels they prefer. A study conducted for the Museums Report of 2016, showed that 44% of the museums highlight the effectiveness of engaging through their website and social media, while 50% have observed an increase in visitor numbers to their websites and 82% in activity on their social media channels. As a consequence, 49% of museums monitored a significant raise in the visitors to the physical space of the museum, following the increased visitors on their online platforms.<sup>26</sup>

### ***Digitalization of the National Museums in The Netherlands***

By the end of 1960's, Museums and Institutes in The Netherlands required an efficient system to assist them in the management of their collections, libraries and catalogues. As a result, computers and new technologies started to permeate and become part of the museums' operations, although the transition was not always entirely supported. The digitization of the Dutch museums was affected by four international events during the years 1967-1970, the formation of IRGMA (Informational Retrieval Group of the Museums Association) in the UK, a conference organized by the Metropolitan Museum of Art in New York about computers and their

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<sup>25</sup>(Department for Digital Culture, Media & Sport, 2018)

<sup>26</sup>(Axiell Museums Archives Libraries, 2016)

potential use in museums, the 8th ICOM General Conference, where computer application in museums were presented and discussed and the publication of a special issue of the ICOM Magazine about Museums and Computers.

While new technology emerged in the 1960s, the first computers were introduced to a relatively small number of institutions in the 1970s. Initially, apart from the systems themselves (hardware and software), museums focused on controlled vocabularies and standards for information processing, leading to the development of the Basic Registration Card as a data format for the registration of museum objects in computer systems. It was implemented by the Dutch government, with the assistance from the international community and it was used as the minimal standard for object cataloguing.

During the 1980s, the cultural sector had not still accepted the new digital information carrier, even though the Dutch government started making an effort to facilitate the transition, by providing funding. By 1990, the possibilities brought by the Personal Computer and the fact that it was easier for buyers to acquire led to a rapid development towards the adoption of networked systems and eventually the Internet. Major organizational changes occurred and new ways of working and problem solving emerged. Due to the development of technology, different departments of the museum (curators, registrars etc.) contributed to the digital collection.

During the first decade of the 21st century, due to the wide use of the World Wide Web, an explosion of websites creation occurred. The benefits of digitization were obvious, since it was now available for everybody to gain access to museum collections from any place around the world. Most of the museums started using computer technology in order to manage their collections and publish basic information about their institutions. Gradually, the international standards related to the information management systems were adopted nationally. The digital transformation of the institutions facilitated work, improved internal and external communication and resulted to significant organizational changes.

In the last few years, new applications and technologies such as 3D, VR and AR emerged, while museums publish their collection online as open data, free for everyone to access. Since the digital collections expanded, the access broadened and the content became more complicated (multi-media/lingual/dimensional), new questions related to communication, sustainability, management and financing have arisen.

Since the beginning of the digitization process in the National Dutch Museums, there have been professionals, who were able to identify the advantages of digital practices. Their dedication and constant effort resulted in the funding of digital projects and the establishment of associations, such as the Commission for Documentation of Dutch Maritime Collection (Commissie Documentatie Nederlandse Maritieme Collecties), also known as MARDOC. It was a network consisted of art historians and ICT specialists who would provide support to various museums and policy makers by teaching, advising and eventually distributing software, which facilitated the integration of computers into the museums. MARDOC and other communities had an essential role in the consolidation of computers in the museum industry.

The Dutch government had a significant role in the digitization process, always providing support to the experimentation, development and implementation of digital

methods and practices in the museum sector. Since the late 1960s, it provided funding, mainframe computers for museum data processing and made a considerable effort to explore automation.

During the 1990s the government supported the museums and institutions in order to acquire personal computers and launched the Deltaplan voor het Cultuurbehoud (Delta Plan for the Preservation of Cultural Heritage). The plan aimed to train institutions regarding the management and conservation practices and to facilitate these procedures, so that the museums would be able to handle it with their conventional resources. The Ministry of Culture and the Ministry of Housing, Physical Planning and the Environment funded the plan, which applied to museums, archives, monuments and archaeological resources. The Deltaplan was the first long-term program by the government regarding the registration of objects in national level and indirectly the digitization of collections. A second investment in the end of the decade was resulted from the development of an 'electronic' government. A national effort to create a Dutch information society was made, which involved the digitization of cultural heritage and was considered a significant asset in the new economy.

Between 2000 and 2010, the first collections were made available online and the Ministry of Culture established a grant scheme for successful digitization. Although the grant existed only for three years, it completely affected the professionalization of digitization projects. Institutions were required to implement information plans, adopt a set of standards, make digitized content available online and perform evaluations. The scheme had a broad impact and it is considered remarkably successful in achieving tangible results.

### ***Developing a National Digital Strategy***

The European Cultural Heritage Strategy for the 21<sup>st</sup> century mentions that: *"A broad spectrum of methods and techniques is available for developing the heritage experience, and mechanisms involve both human participation and augmented reality. Digital tools and networks – particularly the internet – offer unprecedented possibilities for new access paths encouraging interactivity"*, while amongst the recommendations to the members of European Union is to: *"make digital heritage-related information more open, more accessible and more user-friendly"*.<sup>27</sup> As far as The Netherlands is concerned and according to the Dutch Digitalization Strategy, the government wishes the country to lead the way in the application of new technology and for that reason, a single, joint strategy concerning the digitalization is presented.<sup>28</sup>

The purpose for a national digital strategy is a *"future proof and cost-efficient infrastructure that will encompass all of the various domains while meeting the needs of heritage users"*.<sup>29</sup> The approach focuses on the development of a consistent and cross-sector framework and a network organization management bounded by policy. As a result, more facilities are going to be connected, standardized and developed. To achieve the above, cooperation and sharing of knowledge between the heritage sectors, producers, governments, institutions, intermediaries and users is necessary.

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<sup>27</sup>(Council of Europe, 2017)

<sup>28</sup>(Ministry of Economic Affairs and Climate Policy, 2018)

<sup>29</sup>(Digital Heritage Network, National Digital Heritage Strategy, 2015, p. 15)

The strategy aims to a more binding focus on policy, openness and compatibility, to compulsory use of standards, to the development and implementation of reference architecture for the cultural sector and to heritage-wide cooperation, which will improve the developmental, facilitative and managerial roles of governmental and institutional collection managers.

In 2015, the Dutch Government published a strategy plan which *“offered a perspective on developing a national, cross-sector infrastructure of digital heritage facilities. It contains objectives, starting points, and specific work programmes for a joint approach”*<sup>30</sup>. The Digital Heritage Network (*Netwerk Digitaal Erfgoed – ‘NDE’*), namely the partnership aiming to improve the visibility, usability and sustainability of digital heritage, developed the strategy, while many individuals from various related sectors contributed to the procedure by participating in working groups, meetings and research. According to their manifesto:

1. *The visitor is the center. The needs of the visitor come first. This is why they strive for dividing lines between bridging collections and giving the visitor limitless access to the heritage of The Netherlands using digital techniques.*
2. *Share from the source. We are responsible for ensuring that our heritage information is appropriately available in the network, so that it can be managed, connected, enriched and used more efficiently and effectively.*
3. *Network principles. We use information architecture, facilities and standards to make our heritage information as visible, usable and sustainable as possible.*
4. *Everyone contributes. We realize that the success of the network is the sum of the contributions from the participants. We therefore share our facilities, developments, knowledge and experience as much as possible.*
5. *Open, connected and innovative. We are ambassadors of the network and promote the core values “open, connected and innovative”.*<sup>31</sup>

The Ministry of Education, Culture and Science (*Onderwijs, Cultuur en Wetenschap*) established the network, consisting of national institutions seeking to professionally preserve and manage digital data, such as the National Library, The Netherlands Institute for Sound and Vision, The Netherlands Cultural Heritage Agency and the Royal Netherlands Academy of Arts and Sciences, the DEN Foundation and a significant number of associations both related to the heritage and other sectors.

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<sup>30</sup>(Digital Heritage Network, National Digital Heritage Strategy, 2015, p.1)

<sup>31</sup>(Digital Heritage Network)

## Case Study: The Rijksmuseum, Amsterdam

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The State Museum in Amsterdam, known as The Rijksmuseum, is the national museum of The Netherlands and it is considered to be one of the most significant cultural institutions in terms of history, collection and popularity, both in The Netherlands and in Europe as well. The museum was established in Amsterdam in 1808, initially as the Royal Art Museum and, eventually as the home of the National Art collection. Since then, over 1,000,000 physical items have been collected, while today the museum holds the finest collection of Dutch masterpieces in the world, including the work of seventeenth century masters, Rembrandt van Rijn and Johannes Vermeer.<sup>32</sup>

In contrast to other important cultural institutions around the world, which specialize in international schools, The Rijksmuseum – and the majority of other National Museums in The Netherlands – strongly emphasizes in the National school of painting. Since the masterpieces of Dutch painting are proportionately more represented, The Rijksmuseum was considered a history museum more than a fine arts museum. As Carel Blotkamp suggested: *“Painting was prototypical of Dutch culture as such: it was seen as a faithful reflection of a self-confident bourgeois society, founded on the pillars of realism, industry, domesticity, neatness, and liberal attitudes in religious and political matters. (...) Painting is in the blood of the Dutch; painting is their principal contribution to European culture. The clichéd view, formed in the late-eighteenth and nineteenth centuries, is stubbornly persistent”*.<sup>33</sup>

Until 1885, it was housed in the Trippenhuis, when the collection was moved to a neo-gothic building, constructed to a piece of land offered by the city of Amsterdam to the State. The architect was Pierre Cuypers, who tried to adapt his own ideas and the principles of gothic rationalism with the international standards for public buildings during the second half of the nineteenth century.<sup>34</sup> In 1885, when the construction of the museum was completed, it consisted of the main building, the surrounded museum garden and the director’s villa. During the last two centuries, various transformations have been occurred, either extending the existing spaces or reconstructing them.

### **The New Rijksmuseum**

The most recent and holistic renovation of The Rijksmuseum started in 2003, lasted 10 years and resulted in a modernized, world-leading museum, designed by Cruz y Ortiz arquitectos. Throughout the renovation, a great effort has been made to preserve the layout and the original concept of Pierre Cuypers, wherever this was possible.<sup>35</sup> Their plan, among others, included the creation of a two-part Atrium, the construction of The Asian Pavillion, a new spacious and bright entrance and restored galleries. Not only the building, but also the presentation of the collection was

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<sup>32</sup> (Richards, 1996)

<sup>33</sup> (Blotkamp, 2004)

<sup>34</sup> (Meurs & van Thoor, 2013)

<sup>35</sup> <https://www.rijksmuseum.nl/en/renovation/the-renovation>



completely transformed. Private donors, businesses and funds made it possible for the museum to expand its collection and exhibit more than 8,000 objects in a chronological order, offering the visitor a unique journey through the Dutch history and art.<sup>36</sup>

The ultimate and ambitious goal of the whole renovation project of The Rijksmuseum was to broaden up their audiences as much as possible. New developing methods and preservation technologies were employed, leading to an inspiring and intriguing physical space, combined with an equally fascinating online presence of the museum. According to Julia Fallon, Senior Policy Advisor of the Europeana Foundation: *“The renovation of The Rijksmuseum provided an inspiring example throughout the cultural heritage sector, in many areas of operation: from gallery development, visitor engagement and online access policy. Thanks to their own impact assessment looking at the economic and social impact of the renovation, we’ve taken a look at what we can learn from that, and how it starts to articulate the value of their digital strategy.”*<sup>37</sup>

After the opening of the new museum in 2013, Booz & Company completed a research about the economic and social impact of the renovation. According to their report, the annual economic impact of the museum increases and contributes € 90 million per year to the Dutch economy. Their estimation was based on various factors, such as the employment opportunities the museum was able to provide after the renovation. As far as the social impact is concerned, it was examined at the local, national and international level. The key findings were that The Rijksmuseum promotes cultural activities and increases the appeal of the city for visitors and businesses, while at the national level, it is considered to be an iconic institution of the Dutch identity, having a leading role in conservation, restoration, scientific research as well as design innovation and product development. Finally, the research concludes that the new Rijksmuseum redefines its position in the world map, making it one of the ‘must-visit museums’, while it has a significant role in building connections between other cities of the world, in terms of politics and economics.<sup>38</sup>

In 2013, when the New Rijksmuseum, with the new strategy, mindset, vision and mission, opened to the public, a considerable growth was observed in terms of the visitors. The number of visitors per year was more than doubled compared to the previous years, reaching the total number of 2.246.122. According to the most recent Annual Report of The Rijksmuseum, the total number of the museum’s visitors for 2018 was 2.344.353, slightly increased, compared to 2017 and 2016. The number of International visitors has been raised up to 1.469.557, counter to the national visitors, who were counted at 874.796. The categories which demonstrate a significant increase are the school related visits and the youth up to and including 18 years old.

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<sup>36</sup> (The Rijksmuseum, 2013)

<sup>37</sup> (Fallon, 2018)

<sup>38</sup> (Booz & Company, van Beuningen, & Tieleman, 2013)

## ***Digital Strategy of The Rijksmuseum***

During the recent ten-year renovation of The Rijksmuseum a significant step towards the digitization of the collection and the general adoption of digital tools and methods for the function of the museum took place, although computer technology was already part of the museum's operations since the 1980's. Although the digital strategy of the museum used to be public, since 2013 it is kept private and it is not mentioned specifically in the museum's annual reports. The Digital Department of the museum is growing, and many different projects have emerged over the last few years, establishing the leading role of The Rijksmuseum in that field.

After the reopening of the museum, their open policy is apparent, since according to the report of the Director: *"The Rijksmuseum wants to be open, open in the stories it tells, with an open view of the history of the Netherlands, open to the society of today, open to sharing knowledge and skills."*

One of the first decisions of the museum's management teams in 2013 was to provide the Multimedia Tours available for free, by downloading the Rijksmuseum App, which could be used on every smartphone, adapting in the museum's strategy, to share as much information as possible about the collection without a fee.<sup>39</sup> In the same year, the educational center of The Rijksmuseum, the Teekenschool opened adding another initiative taken by the museum, in which the digital element was predominant. A wide range of activities were offered in a workshop, fully equipped with the latest digital equipment for photography, animation, image processing, 3D printing, designing and laser cutting. People of every age were able to experiment with the latest developments in digital media.

As it is published in the following year's Annual Report, the museum further invested to Mobile application, providing additional functions, like in-depth insights into every century, multimedia tour in seven languages, tours for special occasions (such as Mother's Day, Father's Day or Gay Pride), family guides and a family game, in which the cooperation between family members is required. The game was awarded with the Golden Prize for Mobile Application at the International Audiovisual Festival on Museums and Heritage and with a prize in the "Apps on mobile devices" at the Heritage in Motion, in 2015.<sup>40</sup>

During 2015, the popularity of the museum's website grew and resulted in adjustments, in order to make the information available, even more and easier accessible to the public. After joining social media platforms, such as Facebook and Twitter, The Rijksmuseum also became active on Instagram, launching a successful campaign, which draw a lot of attention, the #emptyrijks campaign and where twenty influential Instagram users took photos in the empty museum.

In 2017, the management of the museum decided to take a new step forward, attempting to deepen and broaden the bond with the museum's audiences. The ultimate goal was for the visitor to keep coming back to the museum, by being open-minded, making the public curious and encouraging new encounters. The digital expressions and means were one of the main strategies adopted, in order to create a personal bond, fascinate and tempt the audience to visit the museum. From that

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<sup>39</sup> (van de Wiel, Rijksmuseum Jaarverslag 2013, 2014)

<sup>40</sup> (van de Wiel, Rijksmuseum Jaarverslag 2014, 2015)

moment on until now, the digital department became one of the fundamental priorities for the future of the museum.<sup>41</sup>

The 2018 Annual Report states that the main objective of the museum is to *“deepen and broaden the bond with its audience and strengthen the dialogue with the public”*.<sup>42</sup> Through the vast collection, the museum aspires to empathize and touch the visitors, creating new and exciting experiences, which widen their minds and conception of their environment. Visitor became the primary focus of the museum’s mission, whether inside and outside the museum, while the museum’s management aim to share its valuable collection with as many people as possible. In order to accomplish those targets, the museum’s strategy and vision for 2017 had three main ambitions: a) receive 2.5 million visitors per year, b) adopt innovative digital resources and c) a visionary exhibition program. It is obvious that progress and innovation regarding their digital strategy is one of the main priorities for the museum’s development and goals for the future.

During my communication with the Head of The Rijksmuseum’s Digital Department, Ms. Nanet Baumer, we discussed about the museum’s approach to digital strategy and innovations. As she explained, the main priority of the Digital Department is the social currency, which refers to the actual and potential assets from the presence in social networks and communities, both digital and offline. In order to reach and engage with a wider audience, they choose to share and interpret the museum’s activities, collections and exhibitions through storytelling, creating a personal bond with the public. Apart from that, the acquisition of customer data regarding personal, behavioural and demographic information is greatly significant for the Digital and Marketing Department of the museum.

As far as the risks they had to deal with over the last few years concerning the implementation of the museum’s strategy, Ms. Nanet Baumer mentioned that they had to focus on one thing at a time and make smaller and more steady steps. In order to achieve that, more experiments and tests regarding to their methods were required. The museum’s current approach to the implementation of their strategy is data-driven, meaning that they gain insights which are mainly based on in-depth analysis informed by numbers. Data are collected through visitors’ interactions and engagements, in order to predict future behaviours.

Finally, when Ms. Natet Baumer was asked about the museum’s vision for the future, concerning the digital strategy she replied: *“For us an online visit is just as important as an offline visit. We, also, offer the digital visitor a valuable museum experience and assume long-term conversion”*. It is clear, that through a successful digital strategy, The Rijksmuseum attempts to reach and engage with a wider audience, aiming to attract individuals to the physical space of the museum, through their online presence and the wholesome experience they provide.<sup>43</sup>

According to New Nodes, a consultancy firm which advises clients regarding their strategies and development tactics, *“Digital innovation is not something you do once a year, but a strategic theme that requires a cultural change”*. To accomplish that, they proposed the creation of the Rijkslab, an environment which will allow innovative digital projects and ideas to develop and is also mentioned in the last annual report of

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<sup>41</sup> (van de Wiel, Rijksmuseum Jaaverslag 2017, 2018)

<sup>42</sup> (van de Wiel, Rijksmuseum Jaarverslag 2018, 2018)

<sup>43</sup> (Baumer, 2019)

the museum. Specifically about the Rijkslab they explain that *“The innovation lab will be a place in the Rijksmuseum where there is room to explore and utilize the added value of digital technology, a place to collaborate with partners with refreshing knowledge and skills, a platform where employees of the Rijksmuseum will have the opportunity to present their valuable put ideas into practice”*.<sup>44</sup>

### *Digitization of the collection*

In 2004, two additional sections in the museum were formed, the Conservation section and the Registration and Documentation section, which was later renamed to Collection Information. That specific department was responsible for creating a uniform system in order to manage all the information related to the object, both physical and administrative, and make it easily accessible. One of the department's objective was to register and digitize the collection with the highest possible quality. In just two years, 20.000 photographs were uploaded on Adlib, a collection management system, while by 2012, around 25.000 objects were represented by approximately 6 images each.<sup>45</sup> The process of the collection digitization was certainly time consuming and costly, demanded dedication, professionalism and great attention to detail. Cataloguers were employed to provide descriptions of the objects, using structured vocabularies and professional photographers in charge of the high-quality photographs of the collection items.

After reviewing the 2013 Annual Report, it is clear how the registration and digitization of the collection was amongst the priorities of the museum, since the registration rate of the collection was 90% and was planned to grow at 95% in the following year.<sup>46</sup> The inventory books were transmitted in the digital collection management system and as a result, 23.321 objects in total were registered within Prentenkabinet Online.

Five years later, the registration rate of the entire collection reached 100%, with the exception of the works on paper. Due to the fact that the collection of the museum is planned to be transferred in the Collectie Centrum Nederland (CC NL), together with the collections of the Nederlands Openluchtmuseum, Het Loo Palace and the National Service for Cultural Heritage (RCE), two major projects dominated the collection management in 2018. The PK (Print Room) Online and VOILA (Preparing Object Packing Lelystad Amersfoort), the first one aiming to the registration and digitization of all the works on paper and the second being responsible for the safe transfer of the objects to Amersfoort. PK Online showed important progress, resulting in a 10% increase of the registration rate of the works in paper, reaching 69%.<sup>47</sup>

The process of digitization is extremely significant and has a defining role in sharing the collection with the public in the best way possible. The digital images of the objects are constantly checked in order to meet the requirements, regarding their colour, sharpness, exposure, background and file format. International standards, such

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<sup>44</sup> <https://newnodes.nl/rijksmuseum/>

<sup>45</sup> (Navarrete Hernández, 2014)

<sup>46</sup> (van de Wiel, Rijksmuseum Jaarverslag 2013, 2014)

<sup>47</sup> (van de Wiel, Rijksmuseum Jaarverslag 2018, 2018)

as Metamorfoze<sup>48</sup> are used, whenever is possible. The disclosure and digitization of the collection documentation supports the research of the artworks and the production of the file catalogues within the museum. It is a long, multi-year project that started in 2012 with various activities, including the digitization of the inventory cards and all of the annual reports.

### *The Rijksmuseum collection online*

Although the process of digitization is considered to be mandatory and inevitable for all art institutions nowadays, a significant number of them tend to hesitate in sharing their digital collection publicly. Digitized collections can be used as a powerful tool for research and learning and by sharing them publicly, museums are able to implement their mission to educate and inform the public on the modern digital age. The Rijksmuseum is among a small but growing number of museums around the world approaching the challenges imposed on the cultural heritage sector by digital technologies in a different way, making their whole digitized collection available online, in the highest possible quality, without any restrictions, free and open for everyone to access.<sup>49</sup> As Taco Dibbits, the museum's Director of Collections stated in an interview with the New York Times: *"We're a public institution, and so the art and objects we have are, in a way, everyone's property. With the Internet, it's so difficult to control your copyright use of images that we decided we'd rather people use a very good high-resolution image of the 'Milkmaid' from the Rijksmuseum rather than using a very bad reproduction"*.<sup>50</sup>

Furthermore, museums choose to keep their digital collections private, or accessible only to the institution's members or friends, in an attempt to assure that the artworks are not going to be inappropriately reused, protecting them from any kind of maltreatment. However, controlling the flow of the images and reproduction is no longer possible, due to the explosion of digital technologies in the modern society. There is absolutely no point anymore in trying to limit the access to a public domain artwork or the reproduction of it, since image sharing has become omnipresent and effortless. As Taco Dibbits explains, The Rijksmuseum offers absolute freedom to the public on the ways they can adapt a masterpiece of their collection, adding that: *"If they want to have a Vermeer on their toilet paper, I'd rather have a very high-quality image of Vermeer on toilet paper than a very bad reproduction"*.<sup>51</sup>

The physical space of The Rijksmuseum that was significantly increased after the recent renovation, could not display more than 8,000 objects in the permanent exhibition. Therefore, the need to show more items from their collection emerged and as a result, the process of creating digital representations of the artworks and making them available online, started in 2012. Approximately 150.000 images of the highest

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<sup>48</sup> Metamorfoze is the Dutch national program for the preservation of paper heritage, started in 1997. Metamorfoze is based on a model of selection and prioritization. The program concentrates on material of Dutch origin, which is kept in cultural heritage institutions with a depository function: scholarly libraries, larger regional or local libraries, archival institutions, regional historical centres, historical documentation centres, museums and research institutes. [<https://www.metamorfoze.nl/>]

<sup>49</sup> (Sanderhoff, 2013)

<sup>50</sup> (Siegal, 2013)

<sup>51</sup> (Siegal, 2013)

possible resolution were published on the Internet, free for everyone to access. The images and the information related to them are accessible through multiple access points, including an API (Application Programming Interface) and the museum's website and they are available without any restrictions.

According to the Dutch Copyright Law, a work is protected by copyright for 70 years after the author's death. After that time period, copyright expires, intellectual property rights do not apply, and the work falls under the public domain, meaning that anybody is allowed to reproduce or redistribute them. The Rijksmuseum collection consists mainly of works without any copyright protection and according to Europeana, the digital platform of the European Union for cultural heritage, it has become a remarkable example of a cultural organization making public domain content available, while also profiting from it.<sup>52</sup>

In 2011, when the whole attempt of releasing images initiated, the image bank of The Rijksmuseum offered two available sizes. The medium quality image (.jpg, 4500x4500, appr. 2MB) was available to download for free from the museum's website, while the high-quality file (.tiff and up to 200MB) costed €40. Surprisingly, when the medium quality image was also provided, the revenue of sales increased, but did not succeed the amount of €200.000, representing only 0.2% of the museum's total revenue during that time. Consequently, in October 2013, The Rijksmuseum started releasing the high-quality images for free, without charging them and decided to focus on generating project funding to implement the digitization of the entire collection and on familiarizing the public with their collection.

### *The Rijksstudio*

According to Alice Cavallo: *'In only a matter of years, the [Rijksstudio] has become a benchmark for connecting people in the Netherlands - indeed all over the world - to one of the most significant museum collections.'*<sup>53</sup> In October of 2012, The Rijksmuseum launched its new website, just before the re-opening of the museum the following spring, after the 10-year renovation. The main section of the website, besides the general information about the museum, the online ticketing service and the news about current exhibitions, is the Rijksstudio. The Rijksstudio was launched, as a medium to promote the museum's collection and images, in an elaborate web environment, adopting the latest design standards. The available free copyright images can be used and manipulated for any purpose, in any museum's attempt to encourage the sharing and creative use of the collection. The Rijksstudio was not the first step of The Rijksmuseum towards digitalization, but with this project the innovative and competitive position of the museum was established. The project gained international attention and was honoured as a pioneering achievement.

Online visitors of the Rijksstudio are able to examine the images in close details, which reveal the materials, or the techniques used. Due to the great importance of visual materials in modern online culture, the presentation of the images is quite meticulous, giving the option for the visitor to view the selected object full screen with a high resolution zoom function allowing them to see the artwork at

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<sup>52</sup> (Pekel, 2014)

<sup>53</sup> (Cavallo, 2018)

very close range. As a result, Rijksstudio contradicts with other online collection representations that resemble library catalogues, offering an amusing online experience and attracting attention.<sup>54</sup>

In every image, the name of the artwork represented, the artist and the date of creation are mentioned. It is, also, indicated if the artwork is currently on display, the location and suggested tour routes to reach it. Apart from that, an extensive list of additional information concerning the object is available. More specifically, the material and the technique are indicated (physical features, material, measurements), as well as the subject, the acquisition and rights related to the artwork (credit line, acquisition, copyright), the relations, the documentation and a persistent URL for the object. The subject of the artwork is described by keywords/hyperlinks, that, if selected, redirect the user to a list of works with the same subject. Finally, the user is able to submit questions, make a remark or add information about the objects.

As the users logs in, they are able to download the image of any available artwork (in the form of JPEG, 4500x4500 pixels on average) and are encouraged to 'get creative' with it. In addition, the user has the option to order a reproduction of a certain artwork, or a specific detail of it, through the website. It is possible for the reproduction to be acquired as a poster, canvas, aluminium or gallery print, in a square, portrait or landscape format. After the exact format's selection, the price of the product is indicated, and the user can proceed to the placement of the order and the payment. Otherwise, a ready-made poster of the work can be purchased.

The intention and main goal of The Rijksmuseum over the last few years is to provide a personalized experience to the visitors, both inside the museum and via the website, before, during and after their visit.<sup>55</sup> One of the ways to achieve this, is through Rijksstudio, where everybody is invited to create personal collections with artworks of their choice. These collections can be shared and therefore, accessed by anyone or they can remain private. If they are public, the number of the views and the reactions to the collection is counted. By saving an artwork, or a detail of it, the user stores it in her/his personal Rijksstudio.

*"The digitalization of the collection, its up-to-date online presentation and the support of open content, allows the Rijksmuseum to appear very progressive"* says Viola Ruhse.<sup>56</sup> The digital and marketing departments of The Rijksmuseum states that: *"the open access strategy has greatly contributed to a rejuvenation of the museum's public perception or 'brand'. Moving away from a traditional and outdated reputation as a major European museum, where academic knowledge preceded full appreciation for works of art, the Rijksstudio has aligned itself with other digital content platforms, nearly putting the curatorial expertise in the hands of the public".*<sup>57</sup>

The Rijksstudio is the digital channel to unlock the museum's valuable collection and making it available to its audiences. The total number of Rijksstudio's increased in 2018 from 380.000 to 477.000<sup>58</sup>, while currently, 504,340 Rijksstudios exist and a great variety of collection subjects can be found, from "Fashion details" to "Fancy Headgear".

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<sup>54</sup> (Rühse, 2017)

<sup>55</sup> (Aroyo, 2007)

<sup>56</sup> (Rühse, 2017)

<sup>57</sup> (Cavallo, 2018)

<sup>58</sup> (van de Wiel, Rijksmuseum Jaarverslag 2018, 2018)

### *The Rijksstudio Award*

The Rijksstudio Award is the museum's most important marketing tool for creativity. The biennial art and design prize of The Rijksmuseum is awarded to the winners of a competition, in which everyone can participate by creating their own masterpiece, drawing inspiration by the museum's collection. The ten finalists and the three winners of the competition are assessed by an international professional jury, and the award includes a monetary prize and the possibility for the winner design to be included in the collection of The Rijksmuseum store. The first competition for the Rijksstudio Award took place in 2014, and only three years later, as a result of a worldwide campaign, the 2017 edition had 2.600 entries from 62 countries.<sup>59</sup>

The Rijksstudio Award 2020 consists of three categories, the 'Rijksstudio Design Award', the 'Young Talent Award' and the 'Public Award'. The only precondition to participate in the competition, is to use images from Rijksstudio, while the design might be submitted in any art form (photo, video, clothing, animation, collage, poem, product).<sup>60</sup>

### *Mobile Application*

According to Statista.com, currently, 45.12% of the population owns a smartphone, meaning that 3.5 billion people are smartphone users.<sup>61</sup> Nowadays, the mobile device is considered to be a pocket-size computer, with a variety of possibilities and an extremely access point to internet, due to the strong presence of Wi-Fi and 3G/4G, almost everywhere. As smartphones become more popular, the application development becomes easier, offering more possibilities to the user. Also, the behavior of smartphone users indicates that apps have become more user-friendly than websites, resulting in the apps being the primary activity and preference for smartphone users.

Taking into consideration this radical growing of smartphones and applications, The Rijksmuseum launched its first application in 2013, when the museum reopened. The app included Multimedia tours, to assist users during their visit to the museum, providing information on more than 300 exhibits. The content was three-layered, since it was consisted of an audio introduction, video and animations and audio by an expert with in-depth information. The application could be downloaded via Google Play or Apple's App Store, without any charge. There was, also, a possibility to rent a device featuring the app, for visitors who preferred not to use their own, costing € 5. The user of the app could choose from 22 tours, with different length and route, while more information was provided if the user typed the number of the artwork.

The second, new edition of The Rijksmuseum's app was developed following the idea that the user should be able to enjoy the collection at any time and place and not necessarily when being at the physical space of the museum. The new app has three main features, the Rijksstudio, Multimedia Tours and the ticketing service. The navigation to the app is kept significantly simple, visual and user-friendly, scrolling vertically for an overview of sets, objects or tours and horizontally, to swipe right or

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<sup>59</sup> (Gorgels, 2018)

<sup>60</sup> <https://www.rijksmuseum.nl/nl/rijksstudioaward>

<sup>61</sup> <https://www.bankmycell.com/blog/how-many-phones-are-in-the-world>



left for next or previous full-screen object picture or multimedia tour stop. As the creators of the app were partially influenced by the horizontal navigation and card design of the Tinder app, which gets more and more popular during the last few years, they decided to focus on the swiping and make it the main feature of the app, skipping the Pinterest-style template. Rijksstudio has a similar layout as on the museum's website, including vertical lists of the collections, allowing the user to zoom in and out and enter into full-screen mode.

As far as tours are concerned, the application offers a variety of them for each visitor to select, such as the 'Highlights' tour, with the most significant, must-see masterpieces or numerous thematic tours, either by artists, subjects, artistic movements etc. As it is already mentioned, one of the main ambitions and goals of the museum, is to provide a personalized experience for each one of the visitors. Therefore, the app includes a 'For you' section, where popular tours from other visitors are displayed and in addition users are able to create their own.<sup>62</sup> Besides the museum's application, interactive tours can, also, be found via SnapGuide application<sup>63</sup> and is mostly used for students in secondary education, both from The Netherlands and international.

### *Social Media*

According to the Museums Report 2016: *"Social media is a great vehicle for museum information. Operating at the opposite end of the spectrum to targeted delivery, social media offers serendipitous exposure to markets and people. Often, the initiating museum may not have foreseen the possibilities. Fortune especially favors social media distribution when an event creates a phenomenon for some unexpected reason, a "viral" event. Having the data and information available at that time can give fabulous exposure."*<sup>64</sup>

Taking into consideration the huge development of social media nowadays and the significant part of population influenced by them, the presence of an art institution in social media is considered vital. The Rijksmuseum has an extremely strong presence on social media platforms, such as Instagram, Facebook and Twitter, as part of their general digital strategy. The museum's accounts are being updated on a daily basis, providing a great variety of posts to the public, such as interesting facts about their collection, artist and galleries, current events and activities, photographs of the museum and 'behind the scenes' snapshots of their events or exhibitions. The accounts seem to have gained a considerable number of followers around the world. More specifically, at the time of completing this study, The Rijksmuseum has 485.000 followers on Instagram, 394.240 followers on Facebook and 241.000 followers on Twitter. According to the official page on Facebook, 550.627 times users have checked-in (visited) at the museum and 19.585 people have shared their experience and rated it, which resulted in a total rating of 4.7 out of 5.

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<sup>62</sup> (Gorgels, 2018)

<sup>63</sup> Snapguide is an iOS application and website which specializes in user generated step-by-step how-to guides. The users are able to create tours on the site, where community members can comment on, rate, and share them.

<sup>64</sup> (Museums, 2016)

An important field of The Rijksmuseum's digital innovation is the digital learning, which aims to give visitors unique museum experiences, either in the digital domain or inside the galleries. Taking advantage of every medium available, The Rijksmuseum has started making podcast, linked to current exhibitions or general subjects related to the collection, where a journalist, writer or ambassador and an expert from the museum tell a story together, usually connecting a contemporary, pop-culture subject with a piece from the collection. Two Youtube channels were launched at the beginning of 2019, RijksTube and RijksCreative. The first contains quick, fun and informative short videos about the intersection between art and pop culture and has an international target group between the age of 25 and 35. Through the 'Is This Art?' series, the current popular culture is explained on the basis of The Rijksmuseum collection.<sup>65</sup>In RijksCreative on the other hand, courses teaching how to be creative, inspired by some of the world's most famous artists are shared for a creative target group between the age of 18 and 55. A new course is shared every week. Currently, RijksTube has 15.700 subscribers and 197.850 total views, RijksCreative 5.230 subscribers and 138.825 total views, while the official channel of Rijksmuseum has 7.380 subscribers and 1.495.370 total views.

### *Operation Nightwatch*

In July 2019, The Rijksmuseum launched the largest research and restoration project in its history. Rembrandt van Rijn's masterpiece, 'Nightwatch', is one of the most famous paintings in the world and the artist's most ambitious work. New advanced techniques and methods allowed specialists to look through the surface of the painting and monitor the changes occurred, during its creation. The museum's intention is to observe all these details and secrets hiding under the surface of the painting, while finding the most appropriate way to preserve such a valuable object. In order to accomplish that, they proceeded to a very extensive research and in-depth analysis, the results of which were later used for the restoration.

The remarkable feature of the 'Operation Nightwatch' is that the whole process was carried out while the audience was watching. The painting was placed in the Night Watch Hall of The Rijksmuseum, in a carefully designed and built glass construction, where visitors were able to witness all the procedures taking place, concerning the research and restoration of the painting. The artwork remained permanently visible throughout the exhibition, while the progress of the research and restoration, together with the highlights of the project were often made available online, either on the museum's website or on the social media platforms. As a result, the whole process and exhibition were accessible and available for anyone to follow, via the Internet, serving the main aspiration of the institute, which is to bring the visitor in the central position of the museum's operations, inside or outside of the physical space of the museum.

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<sup>65</sup> The first episode was about the visual link between the poster of the film "Avengers" and the Night Watch, resulting in positive initial reactions.

## Conclusions

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For the purposes of this dissertation, an attempt has been made to examine the concept of digitalization of the modern cultural organizations and especially museums. Besides the historical review of the process and how digital means were gradually integrated into the museum industry, special attention was given to the museums in The Netherlands. During the process of conducting my research, I came across national documents and provisions, which aimed to the adoption of a national, mutual strategy towards digitalization, with the ultimate goal of providing access to culture for everyone and becoming leaders in the specific field, inside the frames of the European Union, as well as worldwide. Being a developed country, with strong economy, appropriate infrastructure and governmental support for innovation and modernization, I believe that the Netherlands stand as an ideal environment for development and new initiatives concerning the field of digitalization.

By defining an appropriate digital strategy for museums that will result in a concrete audience development plan, I decided to focus on the main aspects of digital practices from the National Museum of Amsterdam, The Rijksmuseum. Having visited the particular museum in the past, the strong innovative character was always obvious, especially as far as the digital tools are concerned. By examining the main aspects of their digital strategy, I concluded that in order to achieve a powerful and at the same time profitable strategy, strong commitment is required and most importantly constant experimentation and carefully designed operations.

The value and importance of the physical space and real-life exhibitions of the museum have to always remain the fundamental priority and the digital tools should assist in the communication, display, education and restoration of the collection. Digital tools, such as websites, social media profiles, multimedia tours and games are not adopted in order to replace the museum experience, but only to reinforce it. The intention from the Marketing and Digital Departments of the institutions is to offer interesting, compelling and engaging experiences outside the physical space of the museum, which will eventually attract the visitors to the actual premises, or a personalized, amusing and educational experience inside the museum, which will result in the return of the visitor to the museum multiple times.

## Bibliography

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- Aroyo, L. (2007). Personalized Museum Experience: The Rijksmuseum Use Case. *Archives & Museum Informatics: Museums and the Web*.
- Axiell Museums Archives Libraries. (2016). *Digital Transformation in the Museum Industry: Museums Report 2016*.
- Baumer, N. (2019, Nov. 13). (E. Alexandrou, Interviewer)
- Blotkamp, C. (2004). Visual arts: the doom of the Golden Age. Accounting for the Past: 1650-2000, in *Dutch Culture in a European Perspective (vol.5)*, D. Fokkema and F. Grijzenhout (eds). Assen: Royal Van Gorcum, 273-295.
- Booz & Company, van Beuningen, H., & Tieleman, T. (2013). *Rijksmuseum. Grand National Product. The Economic Value and Impact of the New Rijksmuseum*. Amsterdam.
- Bryman, A. (2012). *Social Research Methods (4th ed)*. New York: Oxford University Press.
- Burton, C., & Veal, A. (2014). *Research Methods for Arts and Event Management*. Harlow: Pearson Education Limited.
- Cavallo, A. (2018, June 7th). *The Rijksmuseum Masters Mobile*. Retrieved from: <https://www.sothebys.com/en/articles/the-rijksmuseum-masters-mobile>
- Council of Europe. (2017). *Recommendation CM/Rec(2017)1 to member States on the "European Cultural Heritage Strategy for the 21st century"*. Limassol.
- Digital Heritage Network. (2015). *National Digital Heritage Strategy*. Retrieved from: <https://www.government.nl/documents/reports/2015/07/02/national-digital-heritage-strategy>
- Department for Digital Culture, Media & Sport. (2018). *Culture is digital*. London: Crown.
- Dewdney, A., Dibosa, D., & Walsh, V. (2013). *Post-Critical Museology. Theory and Practice in the Art Museum*. London: Routledge.
- EAC/08/2015 (2015). *Study on Audience Development – How to place audiences at the center of cultural organizations – Tender Specifications*. European Commission, Directorate – General for Education and Culture.
- Ellin, E. (1968). An International Survey of Museum Computer Activity. *Computers and the Humanities*, 3(2), 65-86.

- European Parliament. (2017). *Access to culture in the European Union*. Directorate-General for Parliamentary Research Services.
- Eurostat Science and Technology database. (2020). *Digital Economy and Society*. Retrieved from: [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc\\_ci\\_in\\_h&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_ci_in_h&lang=en)
- Fallon, J. (2018). *How the renovation of a world renowned art museum is inspiring a sector in digital transformation*. Retrieved from: <https://pro.europeana.eu/post/how-the-renovation-of-a-world-renowned-art-museum-is-inspiring-a-sector-in-digital-transformation>
- Gorgels, P. (2018). Rijksmuseum Mobile First: Rijksstudio Redesign And The New Rijksmuseum App. *MW18: Museums and the Web 2018*. Vancouver.
- Hammerslay, M., & Atkinson, P. (1995). *Ethnography: Principles in Practice*. London: Routledge.
- Hertz, R. (1993). *Theories of Contemporary Art*. New Jersey: Prentice-Hall Inc.
- Holter, E. (2019). *The Art of Marketing Art: Insights for the application of digital strategy in museums and galleries*. (E-book). Retrieved from: <https://cuberis.com/wp-content/uploads/2019/06/The-Art-of-Marketing-Art.pdf>
- Karatzias, K. (2016). *Audience Development in Public Cultural Centers: A Qualitative Study in Helsingborg and Elsinore (Doctoral dissertation)*.
- Kidd, J. (2016). *Museums in the New Mediascape: Transmedia, Participation, Ethics*. Oxon: Routledge.
- Laine-Zamojska, M. (2011). Digitization of cultural heritage. *Nordisk Museologi*, 125-134.
- Marty, P. F. (2008). Museum Websites and Museum Visitors: Digital Museum Resources and their Use. *Museum Management and Curatorship*, 23 (1), 81-99.
- Mason, J. (2002). *Qualitative Researching (2nd ed)*. London: Sage Publications.
- McTavish, L. (2006). Visiting the Virtual Museum: Art and Experience Online. In J. Marstin, *New Museum Theory and Practice. An Introduction* (pp. 226-243). Oxford: Blackwell Publishing Ltd.
- Meurs, P., & van Thoor, M.-T. (2013). *Rijksmuseum Amsterdam. Restoration and Transformation of a National Monument*. Rotterdam: nai010 publishers.

- Ministry of Economic Affairs and Climate Policy. (2018). *Dutch Digitalisation Strategy. Getting the Netherlands ready for the digital future.*
- Navarrete Hernández, T. (2014). *A history of digitization: Dutch museums.*
- Parry, R. (2007). *Recoding the Museum. Digital Heritage and the Technologies of Change.* London & New York: Routledge.
- Pekel, J. (2014, 8 27). *Democratising the Rijksmuseum.* Retrieved from: <https://pro.europeana.eu/post/democratising-the-rijksmuseum>
- Richards, G. (1996). *Cultural Tourism in Europe.* Oxon: Cab International.
- Rühse , V. (2017). The Digital Collection of the Rijksmuseum. In O. Grau, *Museum and Archive on the Move: Changing Cultural Institutions in the Digital Era* (pp. 37-57). Berlin: De Gruyter.
- Sanderhoff, M. (2013). Open Images. Risk or opportunity for art collections in the digital age? . *Nordisk Museologi* , 131-146.
- Siegal, N. (2013, May 28). *Masterworks for One and All.* Retrieved from: <https://www.nytimes.com/2013/05/29/arts/design/museums-mull-public-use-of-online-art-images.html>
- Smith Bautista, S. (2014). *Museums In The Digital Age: Changing Meanings of Place, Community, and Culture.* Lanham: AltaMira Press.
- The Rijksmuseum . (2013). *Rijksmuseum opens following ten-year transformation [Press Release].* Retrieved from: <https://www.rijksmuseum.nl/en/press/press-releases/rijksmuseum-opens-following-ten-year-transformation>
- van de Wiel, P. (2014). *Rijksmuseum Jaaverslag 2013.* Amsterdam.
- van de Wiel, P. (2015). *Rijksmuseum Jaarverslag 2014.* Amsterdam.
- van de Wiel, P. (2015). *Rijksmuseum Jaaverslag 2015.* Amsterdam
- van de Wiel, P. (2016). *Rijksmuseum Jaaverslag 2016.* Amsterdam
- van de Wiel, P. (2018). *Rijksmuseum Jaarverslag 2018.* Amsterdam.
- van de Wiel, P. (2018). *Rijksmuseum Jaaverslag 2017.* Amsterdam.
- Van den Akker, C., & Legêne, S. (2016). *Museums in a Digital Culture.* Amsterdam: Amsterdam University Press.

Whitelaw, M. (2015). Representing Digital Collections. In D. Carlin, & L. Vaughan, *Performing Digital: Multiple Perspectives on a Living Archive*. Oxon: Routledge.

Yin, R. K. (2014). *Case Study Research Design and Methods (2nd ed.)*. Thousand Oaks: Sage Publications.

**Websites** (date of access: Jan. 2020)

The Rijksmuseum: <https://www.rijksmuseum.nl/>

Rijksstudio: <https://www.rijksmuseum.nl/nl/rijksstudio>

The Rijksstudio Award 2020: <https://www.rijksmuseum.nl/nl/rijksstudioaward>

Dutch Digital Heritage Network: <https://www.netwerkdigitaalerfgoed.nl/en/>

New Nodes: <https://newnodes.nl/>

## **Appendix: Interview Guide**

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### **A) Personal Information**

1. What is your position in the museum?
2. What are your duties and responsibilities?
3. What are the challenges of your current position?

### **B) Implementation of the Museum's Digital Strategy**

1. What the main priorities of the museum's digital strategy are, i.e. in which area regarding online marketing does the museum invest more time, planning and workforce?
2. Which are the biggest risks you might have faced concerning the implementation of the museum's strategy over the last few years?
3. What is the impact of using digital tools on the museum's audience development?
4. What is the museum's vision for the future, concerning its digital strategy?